

REMARKS

Applicant would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe the subject matter which applicant regards as the invention.

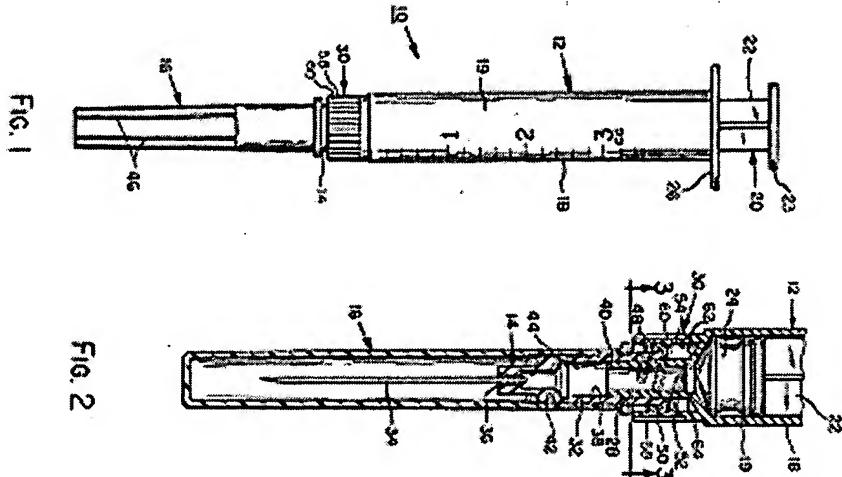
Claims 1, 5-7, 9-10, and 13-16 remain in the application. Claim 1 has been amended to include the features of claims 2 and 4, now cancelled. Claims 3, 8 and 11-12 have also been cancelled.

The Examiner has requested an amendment of the drawings to include features of claim 8. Claim 8 has been cancelled herein. Applicant requests that the Examiner withdraw the drawing objection.

Claims 3-4 and 11-12 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for including the term "preferentially between" therein. Claim 3-4 and 11-12 have been cancelled, herein, thus this rejection is now moot.

Claims 1, 2, 5-10, and 13-16 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. 4,220,151 to Whitney (hereinafter Whitney). For the following reasons, the Examiner's rejection is traversed.

Whitney is directed to a disposable Luer lock syringe provided with an integral Luer tapered needle connector and an integral, internally threaded, Luer lock retaining collar surrounding the connector and having a plurality of circumferentially spaced, longitudinal grooves. Figs. 1 and 2 of Whitney are reproduced below.



Whitney does not disclose all of the features of amended claim 1.

Specifically, claim 1 requires "a cannula which can be connected with the connecting piece". Whitney does not disclose such a cannula. Rather, the conical section of the Luer-lock connection in Whitney, which the Examiner refers to as the cannula, is integrally formed with the syringe body of Whitney and thus is not a cannula "which can be connected with a connecting piece".

Further, claim 1 requires that the central borehole of the claimed cannula "has a constant cross-sectional area q in the axial direction". Referring to Fig. 2, the section of the Luer-lock connection referred to by the Examiner is conical, and thus, does not have a constant cross sectional area in the axial direction.

The Examiner's supposition of the conical portion of the Luer-lock connection of Whitney as the claimed cannula is unusual and as evidenced above, does not anticipate all of the features of the claimed invention. Whitney itself labels element 34 as the cannula (see Fig. 2 above), which is the interpretation understood in the art. The claimed invention is distinguishable from Whitney, as generally understood,

as well. Using the common interpretation of the cannula in Whitney, Whitney fails at least to disclose the borehole in the transition segment and the central borehole (of the cannula) having the same cross sectional area, as required.

Further Whitney does not disclose the ratio of the cross sectional areas q:Q being between 0.200 and 0.033.

As a result of the invention configuration of the cannula in the present invention, a lower pressure reduction due to a large ratio between the diameter of the central borehole of the cannula and the diameter of the cavity of the syringe is achieved. Also, due to the constant diameter of the central borehole of the cannula, no additional forces are exerted onto the connection between the syringe body and the cannula which would arise through further restrictions on the central borehole of the cannula.

In view of the statements made above, reconsideration and withdrawal of the rejection of claim 1 under §102(b) is respectfully requested. Claims 2, 5-7, 9-10, and 13-16 depend directly or indirectly from claim 1 and are believed to be allowable at least for the reasons stated above. Reconsideration and withdrawal of the rejection of claims 2, 5-7, 9-10, and 13-16 is respectfully requested.

Claims 3-4 and 11-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Whitney. Claims 3-4 and 11-12 have been cancelled herein, thus, this rejection is now moot.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite

prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 18-0160, our Order No. LUS-16768.

Respectfully submitted,

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